

ABSTRACT OF THE DISCLOSURE

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**ENZYMATIC TREATMENT OF WHEY PROTEINS
FOR THE PRODUCTION OF ANTIHYPERTENSIVE
PEPTIDES AND THE RESULTING PRODUCTS**

Enzymatic digests of whey protein concentrates were prepared using animal, bacterial and fungal proteases, and evaluated for antihypertensive activities. The highest ACE-inhibitory activity was obtained with the purified peptide β -lg (f142-148) obtained by chemical synthesis, for which an IC_{50} value of 0.04 mg powder.ml⁻¹ was found. The hydrolysates derived from BiPRO™ whey protein isolate and β -lg both gave higher antihypertensive activities (IC_{50} values of 0.29 to 0.90 mg powder.ml⁻¹) than the other hydrolysates tested (IC_{50} values of 0.96 and 1.30 mg powder.ml⁻¹). The recovered hydrolysate can be used to treat hypertension in mammals such as humans and domestic pets such as dogs and cats.